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ABSTRACT

The Associate of Arts and Associate of Science degree programs offered by selected colleges and universities in 13 western states were examined to determine relevant information regarding the composition of the degrees offered. The study specifically concerned: the purpose of the degree, the title assigned to the degree, the length of time required to complete the degree, the total quarter-hour credits required for completion of the degree, the number of quarter-hour credits required in the major field of study, and the number of quarter-hour credits required in the areas of math-science, social science, English and humanities, physical education, general education, and electives. Attention was also given to the provisions made for applying associate degree work toward a bachelor's degree. Information was obtained from college catalogs, bulletins, and other published information furnished by the 20 selected four-year degree granting colleges and universities included in the study. Conclusions reached from the study findings are: (1) the primary reason for offering associate degree programs is to prepare the recipients for employment; (2) there is no consistency of titles among the programs in related areas of study; (3) the average number of quarter-hour credits required to complete either the Associate of Arts or the Associate of Science degree is 99, and the time required to acquire these credits is, in most cases, two years and in no instance exceeded two years and one semester. The mean for each area of the degrees is tabulated. (DB)

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A SURVEY OF ASSOCIATE OF ARTS  
AND  
ASSOCIATE OF SCIENCE DEGREE PROGRAMS  
IN 13 WESTERN STATES

by

Gerald Bekker

A Paper Submitted to  
Oregon State University

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the Requirements for

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## CHAPTER I

### INTRODUCTION

#### Purpose of Study

The community college and junior college movement in the United States has revealed and emphasized the significance of terminal education on the post high school level. Due to the organizational structure of higher education in many states, the two-year terminal education function is being absorbed as an integral portion of the four-year degree granting college or university. The purpose of this study is to examine the Associate of Arts and Associate of Science degree programs offered by selected colleges and universities located in 13 western states to determine relevant information regarding the composition of the degrees offered. Specifically the study is concerned with: the purpose of the degree, the title assigned to the degree, the length of time required to complete the degree, the total quarter-hour credits required for completion of the degree, the number of quarter-hour credits required in the major field of study, and the number of quarter-hour credits required in the areas of math-science, social science, English and humanities, physical education, general education, and electives. Attention was also given to the provisions made for applying associate degree work toward a bachelor's degree.

The associate degree, developed almost entirely after the beginning of the twentieth century, is the newest of the major American collegiate degrees. In 1900, the University of Chicago under the presidency of William Rainey Harper was the first institution in the United States to award the associate degree.

Associate degrees have continued to increase in popularity since their first conference in 1900. In a study of the number of academic degrees earned, Eells reveals that in 1960, 444 junior colleges were awarding associate degrees and also, "In 1960 a complete report from all higher educational institutions in this country showed 156 four-year institutions (including 27 universities, 82 liberal arts colleges, 20 teachers colleges, and 27 other institutions) offering the associate's degree." (6, p. 35) A more recent survey conducted by the United States Office of Education reveals that a total of 160,054 associate degrees were awarded during the 1967-1968 academic year. Included in this total were 44,466 associate degrees granted by four-year institutions. (10, p. 4)

#### Method of Collecting Data

Information used in this study was obtained from current college catalogs, bulletins, and other published information furnished by the 20 selected colleges and universities included in the study. The book, American Universities and Colleges, was consulted to determine accredited, four-year institutions in the 13 western states currently offering associate degree programs.

By compiling pertinent information relating to the individual program, an analysis was made of the materials relevant to the associate degree.

#### Need for Study

The accelerated rate of social and technological changes currently taking place in the United States has created an increasing demand for people with varying levels of preparation. In an attempt to meet the needs of

today's young people, a number of colleges and universities, specifically Northern Montana College, Havre, Montana, are considering either updating or initiating programs of a terminal nature to fulfill the need for various levels of preparation.

An awareness of educational practices and procedures in other institutions offering similar programs and degrees is beneficial in efficiently and effectively organizing and implementing new programs.

#### Definition of Terms

For the sake of clarity, the following terms are defined:

Associate of Arts: Carter V. Good states, "The title or degree conferred by some colleges for the completion of 2 years of college work in arts and sciences beyond the high school or for the completion of the curriculum of a junior college." (9, p. 43)

Associate of Science: Carter V. Good defines the Associate of Science as, "The title or degree conferred by some colleges for the completion of 2 years of college work beyond the high school emphasizing science, or for the completion of a science curriculum in a junior college." (9, p. 43)

#### Limitations

This study is limited to accredited, four-year degree granting institutions in 13 western states offering Associate of Arts and/or Associate of Science degrees in conjunction with a bachelor's or higher degree. The colleges and universities included in this study are accredited by one of the following accrediting agencies: Northwest Association of Secondary and

- . Higher Schools, Western Association of Schools and Colleges, or North Central Association of Colleges and Secondary Schools.

Of the 13 western states surveyed, nine states have accredited four-year degree granting institutions offering Associate of Arts and/or Associate of Science degrees. Within the nine states, 20 institutions offer the Associate of Arts and/or the Associate of Science degree in 128 major courses of study. For a listing of institutions surveyed, see Appendix A.

Although this study is limited to 13 western states, it does not imply that other states are not offering associate degrees, nor does it imply that any relationship exists between requirements or characteristics of the institutions surveyed and those of other colleges or universities in the nation.



CHAPTER II  
NATURE OF THE STUDY

Number of Associate Degrees

In order to evaluate associate degree programs in the western states, it is necessary to determine the number of Associate of Arts and Associate of Science degrees currently being offered in the 20 institutions surveyed. The number of Associate of Arts and Associate of Science degrees available is illustrated by Table I.

TABLE I  
ASSOCIATE OF ARTS AND  
ASSOCIATE OF SCIENCE DEGREES

Degree	Number of Degrees	Per Cent of Degrees
Associate of Arts	35	27.34
Associate of Science	93	72.66
Total	128	100.00

The above table indicates that the number of Associate of Science degrees by far outnumbers the Associate of Arts degrees offered by the 20 colleges and universities surveyed. No explanation was given in any of the catalogs as to why a degree was termed an Associate of Arts or an Associate of Science.

Time Required to Complete Degree

The length of time required to complete the Associate of Arts or the Associate of Science degree is illustrated by Table II.

TABLE II  
TIME REQUIRED TO COMPLETE DEGREE

Time	Number of Degrees	Per Cent of Degrees
2 Years	122	95.32
2 Years, 1 Quarter	3	2.34
2 Years, 1 Semester	3	2.34
Total	128	100.00

The above table illustrates that over 95 per cent of the associate degrees may be completed in two years. The nursing programs usually require more than two years to complete. Many of the nursing programs require the student to have clinical experience which usually adds to the total time required to complete the degree.

#### Purpose of Degree

Most of the catalogs published by the institutions surveyed indicated that the primary reason for offering a two-year program which terminated in an associate degree was to make the recipients employable. Several catalogs revealed that associate degree programs were offered for transfer credit.

Table III illustrates the stated purpose for offering Associate of Arts and Associate of Science degrees.

TABLE III

## PURPOSE OF DEGREE

Purpose	Number of Degrees	Per Cent. of Degrees
Preparatory for Employment	120	93.75
Transfer	8	6.25
Total	128	100.00

As illustrated by Table III, the primary reason for offering associate degree programs is to train people to enter the world of work. This indicates that most of the programs are vocationally oriented and suggests that a student, upon completion of a program, would be able to enter the labor force with a marketable skill.

Titles of Majors Offered

In both the Associate of Arts and the Associate of Science programs, there appears to be no commonalty to the title given to the major area of study by the different institutions. Although the different colleges and universities offer majors in related areas, the only titles of majors that were repeated more than twice were: Nursing--repeated 7 times, Electronic Technology--repeated 5 times, Civil Technology--repeated 3 times, and Law Enforcement--repeated 3 times.

The titles of the majors offered in the Associate of Arts programs are listed in Table IV.

TABLE IV  
TITLES OF MAJORS IN  
ASSOCIATE OF ARTS PROGRAMS

Number of Titles	Title of Major
	<u>Commercial Area</u>
2	Accounting
2	Business Administration
1	Clerical
1	Data Processing
1	Legal Secretary
1	Legal Secretarial Administration
1	Medical Records
1	Medical Secretarial Administration
1	Medical Secretary
1	Office Administration
1	Private Secretarial Administration
2	Secretarial
1	Secretarial Administration
1	Secretarial Science
1	Stenography
	<u>Engineering Area</u>
1	Pre-Engineering
	<u>Health Related Area</u>
2	Nursing
1	Medical Office Assisting
	<u>Police &amp; Fire Area</u>
1	Police Administration
	<u>Miscellaneous Area</u>
1	Chemistry
1	Economics
1	Fashion Trades
2	Liberal Arts
1	Liberal Arts & Sciences
1	Political Science
1	Pre-Kindergarten
1	Pre-Medicine
1	Printing
1	Science
1	Vocational Art
35	Total

The titles of the majors offered in the Associate of Science programs are listed in Table V.

TABLE V  
TITLES OF MAJORS IN  
ASSOCIATE OF SCIENCE PROGRAMS

Number of Titles	Title of Major
	<u>Agricultural Area</u>
1	Agricultural Aviation
1	Agricultural Mechanics
1	Agriculture Sales
1	Farm & Ranch Management
1	General Agriculture Technology
1	Parks & Turf Management
	<u>Commercial Area</u>
1	Accounting
2	Business Technology
1	Data Processing
1	Data Processing Technology
1	Medical & Dental Receptionist
1	Medical Secretarial
1	Office Administration
1	Secretarial
2	Secretarial Science
1	Secretarial Technology
1	Stenography
	<u>Drafting, Design, Graphics &amp; Photography Area</u>
1	Architectural Design
1	Architectural Drafting Technology
1	Design Technology
1	Drafting & Design Technology
1	Drafting-Design
1	Drafting Technology
1	Graphic Arts
1	Graphic Arts Technology
1	Industrial Drafting
1	Mechanical Design
1	Mechanical Drafting Technology
1	Photographic Technology

TABLE V (con't)

TITLES OF MAJORS IN  
ASSOCIATE OF SCIENCE PROGRAMS

Number of Titles	Title of Major
	<u>Electrical-Electronics Area</u>
1	Electrical
1	Electrical Technology
1	Electronics
1	Electronics Engineering Technology
1	Electronics Service
5	Electronic Technology
1	Radio & Television Speech
1	Radio-Television Technology
	<u>Engineering Area</u>
3	Civil Technology
1	Chemical Technology
1	Engineering Physics
1	Mechanical Technology
	<u>Health, Home, &amp; Food Related Area</u>
1	Family Living
1	Food Service Management
1	Food Service Supervision
1	Genealogical Research Technology
1	Home Living
1	Institution Baking
7	Nursing
1	Quantity Food Production
1	Radiation Health Technology
1	Radiologic Technology
	<u>Police &amp; Fire Area</u>
1	Fire Science Technology
3	Law Enforcement
	<u>Trades Area</u>
1	Automotive Technician
1	Diesel Technology
1	General Construction
1	General Mechanics
1	Light-Building Construction Technology
1	Metal Work
1	Power Mechanics

TABLE V (con't)

TITLES OF MAJORS IN  
ASSOCIATE OF SCIENCE PROGRAMS

Number of Titles	Title of Major
	<u>Trades Area</u>
1	Surveying
1	Tool Design Technology
1	Welding Technology
	<u>Miscellaneous Area</u>
1	Arts & Crafts
1	Commercial Art
1	Costume Design & Clothing Construction
1	Dance
1	Library Clerk
1	Library Technology
1	Manufacturing Technology
1	Merchandising
1	Music
1	Nature Study
1	Piano Technology
1	Public Works
1	Recreational Leadership
1	Theater
<u>93</u> Total	

Table IV illustrates that the greatest number of majors offered leading to an Associate of Arts degree is in the commercial area. Table V points out that the greatest number of majors offered leading to an Associate of Science degree is in the health, home, and food related area.

Associate of Arts and Associate of Science degrees may be obtained in the same general areas except in the drafting, design, graphics, and photography area; the electrical-electronics area, the trades area, and the agricultural area where only an Associate of Science degree may be obtained.

Total Quarter-Hours Required to  
Complete Associate Degree

Table VI shows the range and distribution of the quarter-hour credits required to complete the prescribed curriculums in the 128 different associate degree programs surveyed.

All semester-hours were converted to quarter-hours at the ratio of one semester hour equals one and one-half quarter-hours.

TABLE VI  
TOTAL QUARTER-HOURS REQUIRED TO  
COMPLETE ASSOCIATE DEGREE

Number of Quarter-Hours	Number of Degrees	Per Cent of Degrees
90	5	3.91
93	16	12.50
95	1	0.78
96	43	33.60
97	1	0.78
98	7	5.47
99	2	1.56
100	1	0.78
101	8	6.25
102	14	10.94
103	1	0.78
104	9	7.03
105	3	2.34
106	3	2.34
107	4	3.13
108	4	3.13
110	1	0.78
111	1	0.78
112	2	1.56
120	2	1.56
Total	128	100.00
Mean = 99		



As indicated by Table VI, a total of 96 quarter-hours is most frequently required to complete an associate degree. When 96 quarter-hours are required for completion of the program, a student must average 16 quarter-hours per quarter to fulfill the total credit requirement.

Six programs required in excess of 108 quarter-hours for completion. These six programs required more than two academic years to complete. (See Table II)

Quarter-Hours Required in  
Major Area of Study

Table VII illustrates the range and distribution of quarter-hour credits required in the major area of study for Associate of Arts and Associate of Science degrees. Courses in the major area of study were classified according to the code letters preceding the course numbers in each catalog.

Semester-hours were converted to quarter-hours at the ratio of one semester-hour equals one and one-half quarter-hours.

TABLE VII  
QUARTER-HOURS REQUIRED IN  
MAJOR AREA OF STUDY

Associate of Arts Degree			Associate of Science Degree		
Number of Quarter-Hours	Number of Degrees	Per Cent of Degrees	Number of Quarter-Hours	Number of Degrees	Per Cent of Degrees
0	3	8.57	11	1	1.08
15	1	2.86	16	1	1.08
17	1	2.86	17	1	1.08
30	1	2.86	21	2	2.15
39	1	2.86	24	2	2.15
41	3	8.57	25	1	1.08
42	1	2.86	27	4	4.30
44	3	8.57	29	2	2.15
45	1	2.86	30	2	2.15

TABLE V'1 (con't)

QUARTER-HOURS REQUIRED IN  
MAJOR AREA OF STUDY

Associate of Arts Degree			Associate of Science Degree		
Number of Quarter-Hours	Number of Degrees	Per Cent of Degrees	Number of Quarter-Hours	Number of Degrees	Per Cent of Degrees
47	3	8.57	31	1	1.08
49	1	2.86	32	2	2.15
50	2	5.71	33	3	3.23
53	1	2.86	35	1	1.08
59	1	2.86	36	1	1.08
60	1	2.86	38	2	2.15
64	1	2.86	39	3	3.23
65	4	11.43	41	1	1.08
66	2	5.71	43	1	1.08
72	1	2.86	44	4	4.30
73	1	2.86	45	3	3.23
76	1	2.86	47	4	4.30
81	1	2.86	48	15	16.13
			49	1	1.08
			50	3	3.23
			51	3	3.23
			52	1	1.08
			53	3	3.23
			54	2	2.15
			56	3	3.23
			57	2	2.15
			58	1	1.08
			60	5	5.38
			63	2	2.15
			66	3	3.23
			67	1	1.08
			70	1	1.08
			71	2	2.15
			74	1	1.08
			78	1	1.08
			83	1	1.08
Total	35	100.03	Total	93	100.11
Mean = 48			Mean = 46		

The preceding table indicates that a trend may be developing in the number of quarter-hours required in the major area of study for an Associate of Science degree with 16.13 per cent of the degrees requiring 48 credits.

The quarter-hours required in the major area of study for an Associate of Arts degree appear to be quite evenly distributed throughout the range.

Quarter-Hours Required in the  
Math-Science Area

Because mathematics is the basic tool used to express scientific data, mathematics was grouped together with the sciences in this study. The courses included in the math-science area are: all mathematics, chemistry, physics, and natural science courses.

Table VIII shows the range and distribution of quarter-hour credits required in the math-science area for Associate of Arts and Associate of Science degrees.

Semester-hours were converted to quarter-hours at the ratio of one semester-hour equals one and one-half quarter-hours.

TABLE VIII  
QUARTER-HOURS REQUIRED IN THE  
MATH-SCIENCE AREA

Associate of Arts Degree			Associate of Science Degree		
Number of Quarter-Hours	Number of Degrees	Per Cent of Degrees	Number of Quarter-Hours	Number of Degrees	Per Cent of Degrees
0	8	22.85	0	6	6.45
4	2	5.71	3	2	2.15
5	8	22.85	4	2	2.15
7	1	2.86	5	1	1.08
9	3	8.57	6	4	4.30
11	1	2.86	8	2	2.15
12	3	8.57	9	10	10.75
15	4	11.43	10	1	1.08
16	1	2.86	11	3	3.23
18	1	2.86	12	14	15.05
41	1	2.86	13	6	6.45

TABLE VIII (con't)

QUARTER-HOURS REQUIRED IN THE  
MATH-SCIENCE AREA

Associate of Arts Degree			Associate of Science Degree		
Number of Quarter-Hours	Number of Degrees	Per Cent of Degrees	Number of Quarter-Hours	Number of Degrees	Per Cent of Degrees
54	1	2.86	15	6	6.45
55	1	2.86	16	2	2.15
			17	2	2.15
			18	11	11.83
			19	3	3.23
			20	5	5.30
			21	1	1.08
			22	4	4.30
			23	4	4.30
			28	2	2.15
			30	1	1.08
			33	1	1.08
Total	35	100.00	Total	93	100.00
Mean = 11			Mean = 14		

Table VIII indicates that the mean number of math-science quarter-hour credits required is three more for an Associate of Science degree than for an Associate of Arts degree.

The preceding table also points out that three Associate of Arts programs require in excess of 40 quarter-hour credits in the math-science area while no Associate of Science programs require more than 33 quarter-hours in the same area.

Quarter-Hours Required in the  
Social Science Area

Included in the social science area are all courses in history, government, sociology, and political science.

Table IX illustrates the range and distribution of quarter-hour credits

required in the social science area for Associate of Arts and Associate of Science degrees.

Semester-hours were converted to quarter-hours at the ratio of one semester-hour equals one and one-half quarter-hours.

TABLE IX  
QUARTER-HOURS REQUIRED IN THE  
SOCIAL SCIENCE AREA.

Associate of Arts Degree			Associate of Science Degree		
Number of Quarter-Hours	Number of Degrees	Per Cent of Degrees	Number of Quarter-Hours	Number of Degrees	Per Cent of Degrees
0	2	5.71	0	4	4.30
4	2	5.71	3	2	2.15
5	5	14.29	4	13	13.93
8	1	2.86	5	19	20.45
11	6	17.14	6	1	1.08
13	6	17.14	7	1	1.08
14	1	2.86	8	1	1.08
15	3	8.57	9	24	25.61
16	1	2.86	10	7	7.53
17	1	2.86	12	5	5.30
18	3	8.57	13	4	4.30
21	2	5.71	14	3	3.23
29	1	2.86	16	2	2.15
31	1	2.86	17	1	1.08
			18	2	2.15
			20	1	1.08
			22	1	1.08
			26	1	1.08
			30	1	1.08
Total	35	100.00	Total	93	100.05
Mean = 13			Mean = 9		

Table IX reveals a similarity in the range of quarter-hour credits required for the Associate of Arts and the Associate of Science programs. Although the range is similar, the mean number of quarter-hour credits required is four higher for an Associate of Arts degree than it is for an Associate of Science degree.

Quarter-Hours Required in the  
English and Humanities Area

Because most colleges and universities place English and humanities in the same department, the two were also grouped together in this survey. English, humanities, and speech courses constitute the English and humanities area.

The range and distribution of quarter-hour credits required in the English and humanities area for Associate of Arts and Associate of Science degrees is shown in Table X.

Semester-hours were converted to quarter-hours at the ratio of one semester-hour equals one and one-half quarter-hours.

TABLE X  
QUARTER-HOURS REQUIRED IN THE  
ENGLISH AND HUMANITIES AREA

Associate of Arts Degree			Associate of Science Degree		
Number of Quarter-Hours	Number of Degrees	Per Cent of Degrees	Number of Quarter-Hours	Number of Degrees	Per Cent of Degrees
5	1	2.86	6	3	3.23
8	1	2.86	7	10	10.75
9	6	17.14	8	10	10.75
12	3	8.57	9	39	41.94
13	6	17.14	12	10	10.75
14	1	2.86	13	6	6.45
15	2	5.71	14	6	6.45
16	1	2.86	15	1	1.08
18	6	17.14	16	2	2.15
19	5	14.29	17	1	1.03
21	2	5.71	18	2	2.15
28	1	2.86	19	1	1.08
			22	1	1.08
			27	1	1.08
Total	35	100.00	Total	93	100.02
Mean = 15			Mean = 10		

The above table illustrates a difference of five in the means with the mean for Associate of Arts programs at 15 and the mean for Associate of Science programs at 10.

All other tables illustrating quarter-hour requirements in the different course areas have a range beginning at zero. This indicates that some Associate of Arts and Associate of Science programs may be completed without obtaining credits in the specified areas. However, no Associate of Arts or Associate of Science degrees may be obtained before credits are earned in the English and humanities area.

Quarter-Hours Required in  
Physical Education

The quarter-hour credits required in physical education for Associate of Arts and Associate of Science degrees are illustrated in Table XI. Although health courses are generally included in this area, the following table deals only with physical education courses. Health courses are included in the area of general education.

Semester-hours were converted to quarter-hours at the ratio of one semester-hour equals one and one-half quarter-hours.

TABLE XI  
QUARTER-HOURS REQUIRED IN  
PHYSICAL EDUCATION

Associate of Arts Degree			Associate of Science Degree		
Number of Quarter-Hours	Number of Degrees	Per Cent of Degrees	Number of Quarter-Hours	Number of Degrees	Per Cent of Degrees
0	20	57.14	0	17	18.28
1	1	2.86	1	1	1.08

TABLE XI (con't)

QUARTER-HOURS REQUIRED IN  
PHYSICAL EDUCATION

Associate of Arts Degree			Associate of Science Degree		
Number of Quarter-Hours	Number of Degrees	Per Cent of Degrees	Number of Quarter-Hours	Number of Degrees	Per Cent of Degrees
2	2	5.71	2	36	38.71
3	2	5.71	3	16	17.23
6	9	25.72	6	22	23.65
9	1	2.86	7	1	1.00
Total	35	100.00	Total	93	100.00
Mean = 2			Mean = 3		

Although 57.14 per cent of the Associate of Arts programs and 18.28 per cent of the Associate of Science programs do not list any physical education courses as requirements for the degree, several institutions require physical education activities but do not grant credit for completion of the course. This indicates that several of the institutions surveyed recognize the importance of physical education in their associate degree programs, but for unknown reasons do not grant credit for student participation in the courses.

Quarter-Hours Required in  
General Education

All courses not included in the major area of study and the areas of math-science, social science, English and humanities, and physical education are included in the area of general education. As a result, the general education area is primarily composed of allied supporting courses and courses in health, education, psychology, and in church supported institutions, religion.

Table XII illustrates the quarter-hour credits required in the area of general education for Associate of Arts and Associate of Science degrees.



Semester-hours were converted to quarter-hours at the ratio of one semester-hour equals one and one-half quarter-hours.

TABLE XII  
QUARTER-HOURS REQUIRED IN  
GENERAL EDUCATION

Associate of Arts Degree			Associate of Science Degree		
Number of Quarter-Hours	Number of Degrees	Per Cent of Degrees	Number of Quarter-Hours	Number of Degrees	Per Cent of Degrees
0	20	57.14	0	9	9.68
2	1	2.86	2	1	1.08
3	1	2.86	3	2	2.15
4	2	5.71	4	2	2.15
5	3	8.57	5	3	3.23
9	1	2.86	6	7	7.53
12	1	2.86	7	2	2.15
13	1	2.86	8	2	2.15
17	1	2.86	9	5	5.38
18	1	2.86	10	3	3.23
21	1	2.86	12	10	10.75
24	2	5.71	13	3	3.23
			14	3	3.23
			15	17	18.28
			17	3	3.23
			18	4	4.30
			19	7	7.53
			20	1	1.08
			21	2	2.15
			23	1	1.08
			24	2	2.15
			27	2	2.15
			31	1	1.08
			34	1	1.08
Total	35	100.01	Total	93	100.05
Mean = 5			Mean = 12		

As shown by the preceding table, a difference of seven in the means indicates that the Associate of Science programs require noticeably more credits in the area of general education than do the Associate of Arts programs.

Quarter-Hours of Electives Required

Table XIII illustrates the quarter-hour credits of electives required for Associate of Arts and Associate of Science degrees.

Semester-hours were converted to quarter-hours at the ratio of one semester-hour equals one and one-half quarter-hours.

TABLE XIII  
QUARTER-HOURS OF ELECTIVES REQUIRED

Associate of Arts Degree			Associate of Science Degree		
Number of Quarter-Hours	Number of Degrees	Per Cent of Degrees	Number of Quarter-Hours	Number of Degrees	Per Cent of Degrees
0	14	40.00	0	39	41.94
4	3	8.57	1	1	1.08
5	4	11.43	2	5	5.38
6	1	2.86	3	5	5.38
7	4	11.43	4	1	1.08
9	1	2.86	5	8	8.60
10	1	2.86	6	3	3.23
12	2	5.71	7	5	5.38
13	2	5.71	9	5	5.38
15	1	2.86	10	1	1.08
19	1	2.86	11	1	1.08
34	1	2.86	12	1	1.08
			13	3	3.23
			15	2	2.15
			16	3	3.23
			18	1	1.08
			19	1	1.08
			20	1	1.08
			21	1	1.08
			25	2	2.15
			26	1	1.08
			31	1	1.08
			36	2	2.15
Total	35	100.01	Total	93	100.08
Mean = 16			Mean = 6		

As the preceding table indicates, 40.00 per cent of the Associate of Arts degree programs and 41.94 per cent of the Associate of Science degree programs do not make provisions for electives. This indicates that the associate degree programs included in these percentages are highly structured and the institution offering the program has prescribed each course needed to complete the requirements for the degree.

Bachelor Degrees Offered in the Same Area of Study as the  
Associate of Arts or Associate of Science Degree

Table XIV reveals the number of associate degree programs in which the curriculums have been structured to enable the student to continue to work toward a bachelor's degree in the same major area of study in which he has completed the requirements for an Associate of Arts or Associate of Science degree.

TABLE XIV

BACHELOR DEGREES OFFERED IN THE SAME AREA OF STUDY AS THE ASSOCIATE OF ARTS OR ASSOCIATE OF SCIENCE DEGREE		
Provision	Number of Degrees	Per Cent of Degrees
Provisions Made for a Bachelor's Degree	65	50.78
No Provisions Made for a Bachelor's Degree	63	49.22
Total	128	100.00

The above table illustrates that slightly more than one-half of the associate degree programs surveyed are offered in areas in which a bachelor's

degree may be earned in the same area of study and at the same institution. This implies that some colleges and universities are attempting to satisfy the demand for varying levels of preparation that are urgently needed in today's society.

## CHAPTER III

### SUMMARY AND CONCLUSIONS

#### Summary

The purpose of this study has been to examine the curriculum composition of Associate of Arts and Associate of Science degree programs offered by selected institutions. This study has been limited to accredited, four-year degree granting colleges and universities located in the western states and does not suggest a comparison with colleges and universities located in other parts of the nation.

Pertinent information relevant to curriculum composition of Associate of Arts and Associate of Science degrees reported in this study consisted of the number of quarter-hour credits required in the major area of study and the areas of math-science, social science, English and humanities, physical education, general education, and electives. Attention was also given to the total number of quarter-hour credits required to complete the degree, the stated purpose in offering the degree, and the title of the degree. Whether the institution offering the associate degree also offered a bachelor's degree in the same major area of study, was also noted.

#### Conclusions

In view of the findings of this study, it seems reasonable to conclude the following:

The primary reason for offering associate degree programs is to prepare

the recipients for employment.

Insofar as the title given to the major area of study is concerned, there does not appear to be any consistency of titles among the programs in related areas of study.

The average number of quarter-hour credits required to complete either the Associate of Arts or the Associate of Science degree is 99. The time required to acquire the 99 quarter-hour credits in most cases is two academic years and in no instance did the time exceed two years and one semester.

With respect to the number of quarter-hour credits required in the various areas covered in this study, the mean for each area for an Associate of Arts and an Associate of Science degree is as follows:

<u>Associate of Arts</u>		<u>Associate of Science</u>	
<u>Areas</u>	<u>Mean</u>	<u>Areas</u>	<u>Mean</u>
Major Area of Study	48	Major Area of Study	46
Math-Science	11	Math Science	14
Social Science	13	Social Science	9
English and Humanities	15	English and Humanities	10
Physical Education	2	Physical Education	3
General Education	5	General Education	12
Electives	16	Electives	6

Slightly more than one-half of the associate degree programs included in this study provide the student with the option of seeking employment after completing the associate degree or continuing toward a higher degree in the same area of study.

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# APPENDIX A

## COLLEGES AND UNIVERSITIES SURVEYED IN 13 WESTERN STATES

Institution and Address	Degree(s) Granted	Number of Associate Degree Programs
<u>Alaska</u>		
University of Alaska College, Alaska	Associate of Arts	5
<u>Arizona</u>		
Northern Arizona University Flagstaff, Arizona	Associate of Science	5
<u>California</u>		
Armstrong College Berkeley, California	Associate of Arts	6
Golden Gate College San Francisco, California	Associate of Arts	4
Loma Linda University Loma Linda, California	Associate of Arts Associate of Science	2 5
Menlo College Menlo Park, California	Associate of Arts	4
Pacific Union College Angwin, California	Associate of Science	10
San Francisco College for Women San Francisco, California	Associate of Arts	1
<u>Colorado</u>		
Fort Lewis College Durango, Colorado	Associate of Arts	1
<u>Hawaii</u>		
University of Hawaii Honolulu, Hawaii	Associate of Science	1
<u>Idaho</u>		

## APPENDIX A (con't)

COLLEGES AND UNIVERSITIES SURVEYED  
IN 13 WESTERN STATES

Institution and Address	Degree(s) Granted	Number of Associate Degree Programs
<u>Montana</u>		
<u>Nevada</u>		
University of Nevada--Las Vegas Las Vegas, Nevada	Associate of Arts Associate of Science	2 7
University of Nevada--Reno Reno Nevada	Associate of Arts Associate of Science	3 13
<u>New Mexico</u>		
Eastern New Mexico University Portales, New Mexico	Associate of Arts Associate of Science	5 3
New Mexico Highlands University Las Vegas, New Mexico	Associate of Arts Associate of Science	1 3
<u>Oregon</u>		
Eastern Oregon College La Grande, Oregon	Associate of Science	1
Oregon College of Education Monmouth, Oregon	Associate of Arts	1
Southern Oregon College Ashland, Oregon	Associate of Science	3
<u>Utah</u>		
Brigham Young University Provo, Utah	Associate of Science	23
University of Utah Salt Lake City, Utah	Associate of Science	12
Weber State College Ogden, Utah	Associate of Science	7
<u>Washington</u>		
<u>Wyoming</u>		

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